CLAIMS:

1. A drill guide assembly for determining the axis for drilling a bore in a generally dome-shaped bone to receive a component of an orthopaedic joint prosthesis, comprising:

a. a drill guide sleeve;

b. a carriage in which the drill guide sleeve is mounted towards a first end thereof so that the angular orientation of the drill guide sleeve relative to the carriage can be adjusted about at least one axis, the carriage including at least one threaded angle-adjustment screw which extends between the carriage and the drill guide sleeve by which the angular orientation of the drill guide sleeve can be adjusted; and

c. a platform which can be fastened to the bone, which includes at least three feet depending from the platform to engage the surface of the bone with the bone extending towards the platform into the space between the feet, in which the carriage is mounted relative to the platform so that the drill guide sleeve extends away from the bone, the platform including at least one threaded translation adjustment screw which extends between the platform and the carriage by which the translational position of the carriage in the plane of the platform, defined by the axis of the translation-adjustment screw, can be adjusted.

2. The drill guide assembly of claim 1, wherein the carriage includes only one angle-adjustment screw.

3. The drill guide assembly of claim 1, wherein the platform includes only one translation-adjustment screw.

4. The drill guide assembly of claim 2, wherein the axis about which the drill guide sleeve rotates and the axis of the translation-adjustment screw are orthogonal relative to each other.

5. The drill guide assembly of claim 1, wherein the carriage includes two angle-adjustment screws.

6. The drill guide assembly of claim 1, wherein the platform includes two translation-adjustment screws.

7. The drill guide assembly of claim 5 wherein the adjustment screws are arranged such that their axes are orthogonal relative to each other.

8. The drill guide assembly of claim 1, wherein the angle-adjustment screw acts on the drill guide sleeve closely adjacent to the point at which the drill guide sleeve is mounted in the carriage.

9. The drill guide assembly of claim 1, further comprising a nut connected to the carriage, wherein the angle-adjustment screw extends through the nut, the nut having a thread which mates with the thread on the screw.

10. The drill guide assembly of claim 9, wherein the angle-adjustment screw is fastened at a first end to the drill guide sleeve so that translational movement of the angle-adjustment screw relative to the drill guide sleeve is inhibited.

11. The drill guide assembly of claim 9, wherein the nut is rotatably connected to the carriage so that the nut is capable of rotating about an axis which passes through and is perpendicular to the axis of the angle-adjustment screw extending through the nut.

12. The drill guide assembly of claim 1, further comprising a nut connected to the platform, wherein the translation-adjustment screw extends through the nut, the nut having a thread which mates with the screw.

13. The drill guide assembly of claim 12, wherein the translation-adjustment screw is fastened at a first end to the carriage so that the translational movement of the translation-adjustment screw relative to the carriage is inhibited.

14. The drill guide assembly of claim 12, wherein movement between the nut and the platform is inhibited.

15. The drill guide assembly of claim 1, further comprising an alignment stylus connected to the drill guide to move with the drill guide relative to platform, the stylus including a first limb which is directed towards the bone to facilitate assessment of the alignment of the drill guide sleeve relative to anatomical features of the bone.

16. The drill guide assembly of claim 15, wherein the stylus can be moved rotatably around the drill guide sleeve.

17. The drill guide assembly of claim 15, wherein the stylus includes a second limb extending from the first limb in a direction generally towards the axis of the drill guide sleeve.

18. The drill guide assembly of claim 17, wherein the length of at least one of the first and second limbs of the stylus is adjustable.